



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/748,667	12/31/2003	Chao-Cheng Lee	TOP 348	2788
23995	7590	11/30/2005	EXAMINER	
RABIN & Berdo, PC 1101 14TH STREET, NW SUITE 500 WASHINGTON, DC 20005				NGUYEN, PATRICIA T
			ART UNIT	PAPER NUMBER
			2817	

DATE MAILED: 11/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/748,667	LEE ET AL. 
	Examiner	Art Unit
	Patricia T. Nguyen	2817

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 22 September 2005.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-18 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-6, 10, 11 and 13-18 is/are rejected.
- 7) Claim(s) 7-9 and 12 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>9/29/05</u> .	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schlotterer et al., U.S. Patent # 5,525,985 in view of Miller, U.S. Patent # 3,863,200.

Figs. 1 and 3 of Schlotterer et al. discloses an amplifier circuit comprising: amplifier 80 can be read as an operational amplifier; resistor network 84 can be read as a resistor network wherein node connects between the two horizontal resistors R from the output of amplifier 80 can be read as an input node; node connects between the next two horizontal resistors R and the resistor 2R can be read as an output node; resistor 2R connects to the input node and ground can be read as a first resistor; the horizontal resistor connects between input node and the output node can be read as a second resistor.

Although Schlotterer et al. does not have a capacitive device coupled between the second input terminal and an input voltage, Miller teaches the use of the capacitive device 36 in Fig. 3 and it would have been obvious at the time the invention was made to a person having ordinary skill in the art to use the teaching of Miller in the circuit of Schlotterer et al. in order to couple the signal to the amplifier since even without the

teaching of Miller, it is well known in the art to use an input coupling capacitor to couple an input into a circuit in order to have a practical use for the circuit.

Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aswell, U.S. Patent # 6,703,682 B2 in view of Miller, U.S. Patent # 3,863,200.

Figs. 4 and 21 of Aswell discloses an amplifier circuit comprising: amplifier 62 can be read as an operational amplifier; MOS feedback resistor 52 can be read as a resistor network wherein in Fig. 21, node N3 can be read as an input node; node N2 can be read as an output node; MOS resistor MN3 can be read as a first resistor; resistor RP2 can be read as a second resistor.

Although Aswell does not mention that the resistance of the first resistor is two times larger than the resistance of the second resistor or the equivalent resistance of the resistor network is $2nx R$, wherein the resistor network includes n stages and the resistance of the second resistor is R , it would have been obvious at the time the invention was made to a person having ordinary skill in the art to design the resistances of the first and second resistors as claimed since the values of the resistances are design variables (see col. 4, lines 48-54 of Aswell) in order to meet system requirements.

Claims 1-6, 13-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Llewellyn et al., U.S. Patent # 6,127,893 in view of Miller, U.S. Patent # 3,863,200 and in view of Mehr, U.S. Patent # 6,545,534 B1.

Fig. 2 of Llewellyn et al. discloses an amplifier circuit comprising: amplifier Amp 2 can be read as an operational amplifier; resistor network 200 can be read as a resistor network or a first resistor network wherein node connects between the two resistors R and 2R from the output of amplifier Amp1 can be read as an input node; node connects between the resistor 2R and the input of Amp2 can be read as an output node; resistor 2R connects to the input node and ground can be read as a first resistor; the horizontal resistor R connects between input node and the output node can be read as a second resistor.

Although Llewellyn et al. does not have a capacitive device coupled between the second input terminal and an input voltage, Miller teaches the use of the capacitive device 36 in Fig. 3 and it would have been obvious at the time the invention was made to a person having ordinary skill in the art to use the teaching of Miller in the circuit of Llewellyn et al. in order to couple the signal to the amplifier since even without the teaching of Miller, it is well known in the art to use an input coupling capacitor to couple an input into a circuit in order to have a practical use for the circuit.

Regarding claims 4 and 11, resistor 2R between input and output of Amp2 can be read as a loading unit.

Regarding claims 10, 14-18, although Llewellyn et al. does not have the loading unit comprises a capacitive device or a capacitive device coupled between the second input terminal and the output terminal, Mehr teaches the use of the capacitive device 110a in Fig. 1b and it would have been obvious at the time the invention was made to a

person having ordinary skill in the art to use the teaching of Mehr in the circuit of Llewellyn et al. in order to control the frequency response to a desired range.

Allowable Subject Matter

Claims 7-9 and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia T. Nguyen whose telephone number is (703) 308-1927. The examiner can normally be reached on 6:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on 703-309-4940. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PTN
November 28, 2005

Patricia Nguyen

PATRICIA NGUYEN
PRIMARY EXAMINER